



AGROMETEOROLOGICAL UPDATE



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RAINFALL SYNOPSIS AND PROGNOSIS

➤ **SYNOPSIS - PAST TEN DAYS**

The strengthening of the tropical weather systems associated with the Inter-tropical convergence zone (ITCZ) continued to promote rainfall over most parts of the country during the reporting period.

➤ **PROGNOSIS - NEXT TEN DAYS**

The presence of a weak depression over the Mozambican channel will for some days pull moisture away from the contiguous coastline, resulting in dry weather persisting for some days but is expected to ease off towards the end of the dekad..

RAINFALL AND TEMPERATURES

RAINFALL

Significant rains continued to fall during the dekad even though below the longterm average (Figure 1). Areas in the upper Highveld and some parts of the Middleveld continued to record above 80mm totals, with a few areas in the Lowveld recording below 20mm (Map 1).

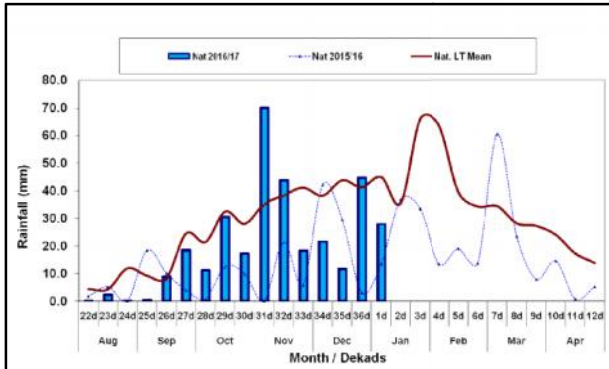
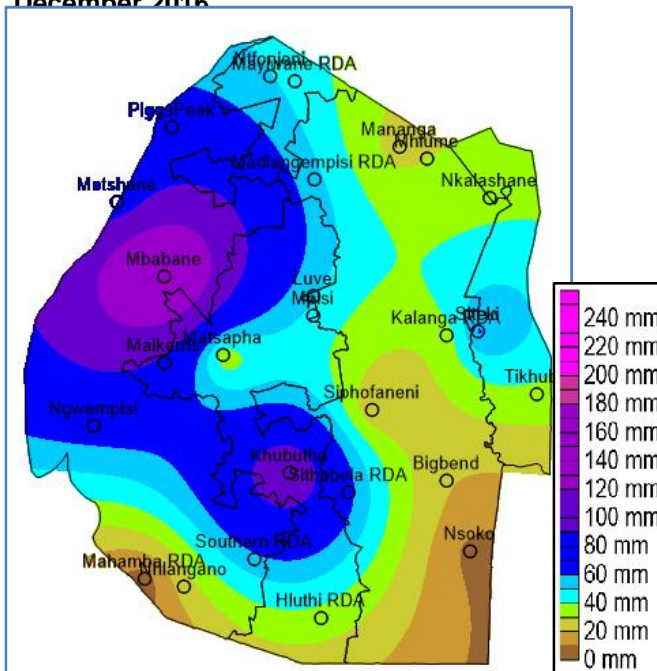


Figure 1: Rainfall distribution as 1st dekad of December 2016



Map 2: Spatial rainfall distribution for first dekad January 2017

Agro-ecological region comparison shows that all the regions received below the longterm average rainfall but much more than last season (2015/16) during the same period.

Table 1: Rainfall (mm) for 1st dekad January 2017

Season	HV	MV	LV	LP
2015/16	23	16	6	9
Average	57	40	36	46
2016/17	41	21	20	31
Anomaly	-16	-19	-17	-15

TEMPERATURES

Below average temperatures were recorded for both maximum and minimum temperatures. During the day depicted by maximum temperatures (Figure 2) and during the night shown by minimum temperatures (Figure 3) both show that the recorded temperatures during the reporting period were less than that of the longterm average.

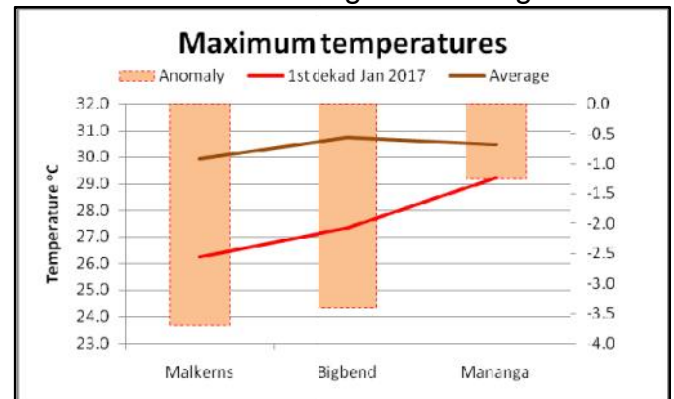


Figure 2: Maximum Temperatures (°C) for 1st Dekad January 2017

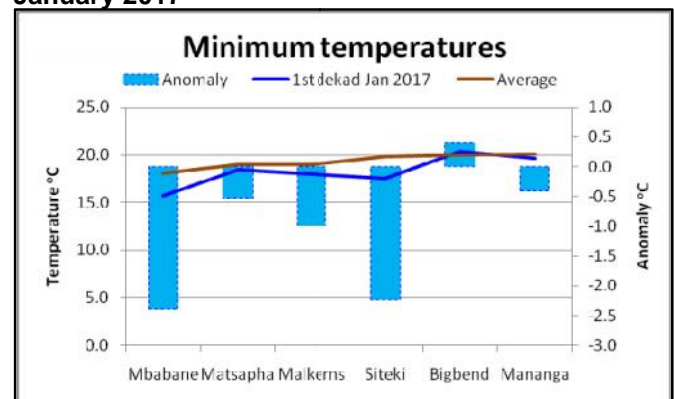


Figure 3: Minimum Temperatures (°C) for 1st Dekad January 2017

CROP PRODUCTION

MAIZE CROP STAGE AND CONDITION

Early planted maize is at grain filling in the Lowveld and at tasselling to cob formation in the Lubombo Plateau (Picture 1), Middleveld and some parts of the Highveld. This crop has since improved albeit the water stress experienced during the last dekad of November to the second dekad of December 2016.



Picture 1: Maize at tasselling stage at Mambane in Lubombo Plateau (courtesy of Princess Dlamini)

OTHER CROPS

Peanuts amongst other legumes were found at pod filling stages in most parts of the country (Picture 2).



Picture 2: Peanuts at pod filling stage (courtesy of Princess Dlamini)

CURRENT FARMING ACTIVITY

Weeding continues to be major activity for some farmers but most are done with weeding already.

LIVESTOCK AND PASTURES

Cattle countrywide are in a good state save for seasonal diseases that are not threatening to be a pandemic as they are curable. Grazing areas are also showing significant improvements due to the recent good rains. Small stock was also found to be in a good state during the reporting period.

WATER (BULK) AVAILABILITY

According to the Department of Water Affairs' Hydrology Division, most major reservoirs (dams) show significant improvement as some have reached 100% capacity from a 0% capacity during the height of the drought as depicted on the table below.

Table 2: Water capacity (%) in major dams as of January 2017

Dam	Capacity (%)
Maguga	39.4
Luphohlo	95
Hawane	100
Mnjoli	20.5
Lubovane	81

MEDIUM-TERM OUTLOOK

RAINFALL

Dry conditions are expected to persist until the 24th January 2017, where significant rains are expected to fall thereafter.

TEMPERATURE

Temperatures are expected to rise to as



Picture 3: Effects of the December 2016 dry spells on maize crops around Kalanga area (courtesy of Melusi Vilakati)

high as 34oC in the Lowveld especially on the 23rd and 24th January 2017.

SOIL MOISTURE

Current soil moisture levels are expected to be sustained over the outlook period, as only a few days will experience heightened temperatures.

WIND SPEED

Wind will be light to moderate in most parts.

Compiled and Issued by: Agrometeorological Unit,

Swaziland Meteorological Service, Ministry of Tourism and Environmental Affairs.

Box 2652, Mbabane, Swaziland. ☎ (+268) 2404 8859 / 2404 6274. Fax: 2404 1530

E-mail: dudu@swazimet.gov.sz

CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION

Please Note: This bulletin is issued in support of the efforts by the National Early Warning Office (NEWU) for food Security in the Ministry of Agriculture to provide Swaziland's current agronomic and meteorological developments to users, stakeholders, government authorities and international organizations during the farming season.

The NEWS is currently made-up of a core team of the National Early Warning Unit (NEWU) of Ministry of Agriculture, the Agromet Unit of the National Meteorology Department and the Agricultural Statistics Unit of Central Statistics Office (CSO).